



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/044,512

01/11/2002

Harry Bims

005878.P002

2821

26111

7590

10/18/2005

STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

ROBERTS, BRIAN S

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/044,512 | Applicant(s) BIMS, HARRY | |
| | Examiner Brian Roberts | Art Unit 2662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Gray et al. (US 6674403)

- In reference to claim 1

Gray et al. teaches a mobile device (120) transmitting a signal and a plurality of access points (110) (repeaters) receiving the signal. A comparison of the actual signal strength data at each access point receiving the mobile device's (120) signal with the signal strength patterns of those access points (110) allow for a determination by the location and tracking manager (170) of the real-time location of the mobile device (120) within the defined space. Such analysis, when performed overtime, allows tracking of the mobile device within and among the locales. (column 12 lines 8-25)

- In reference to claim 2

Art Unit: 2662

In Figure 3B, Gray et al. further teaches generating and storing a signal strength map that indicates which access point is closest to the mobile device. (column 11 lines 6-9)

- In reference to claim 4

Gray et al. further teaches the real-time position detection or motion tracking method can be applied to a communication system utilizing a standard such as IEEE802.11. (column 6 lines 20-25)

- In reference to claim 5

Gray et al. teaches the mobile device (120) may include a cellular telephone, pager, or PDA. (column 6 lines 34-42)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (US 6674403) in view of Balogh (US 2001/0024953) and further in view of Keever et al. (US 2003/012801)

- In reference to claim 3

Art Unit: 2662

Gray et al. teaches a method that covers substantially all limitations of the parent claim. Gray et al. further teaches using the location and tracking manager (170) to push services, data, or other content to the mobile device (120). (column 12 lines 25-29)

Gray et al. does not explicitly teach sending a packet with the destination address being the mobile device via the access point that is closet to the mobile device.

Balogh teaches selecting from a plurality of access points the access point closest to a mobile terminal based on the signal level. A connection is established between the selected access point and the mobile terminal in order to transfer data such as IP packets containing a destination address. [0040-0042]

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the method of Gray et al. to include sending a packet with the destination address being the mobile device via the access point that is closet to the mobile device. as taught by Balogh because it allows for the system (100) to increase the probability of a successful transmission by pushing data to the mobile device via the access point with the strongest signal and that is closet to the mobile device as compared to an access point with a weaker signal that is farther from the mobile device.

The combination of Gray et al. and Balogh teaches a method that covers substantially all limitations of the parent claim.

The combination of Gray et al. and Balogh does not explicitly teach setting a switch port associated with the repeater.

In Figure 1, Keever et al. teaches a router (110) connected to a plurality of access points for routing packets from the network to the user nodes via an access

Art Unit: 2662

point (120). The router inherently sets a port assigned to the access point to route packets via the access point.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the method of the combination of Gray et al. and Balogh to include setting a switch port assigned to the repeater as taught by Keever et al. because it allows packets containing a destination address from the system (100) to be routed to the selected access point (110) for transmission to the mobile device (120) associated with the destination address.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (US 6674403) in view of Keever et al. (US 2003/012801)

- In reference to claim 6

In Figure 1, Gray et al. teaches a system that includes:

- Mobile devices (120) with transmitters to transmit packets wirelessly
- A plurality of access points (110) coupled with mobile device (120) where the access points receive packets wirelessly transmitted from the mobile device and forwards the received packets with the received signal strength indications to perform location tracking of the mobile stations (column 12 lines 8-25)

Gray et al. does not explicitly teach a switch coupled to the repeaters to receive forwarded packets from the repeaters.

Art Unit: 2662

In Figure 1, Keever et al. teaches a router (110) (switch) coupled to a plurality of access points (120) to receive packets from the access points (120).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Gray et al. to include a router (switch) coupled to the access points (repeaters) to receive forwarded packets from the access points (repeaters) because it allows the packets received by the plurality of access points (110) to be multiplexed onto a single channel for transmission to the system (100) as shown in Figure 1 of Gray et al.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Elson et al. (US 2003/0012168) teaches a low-latency multi-hop ad hoc wireless network.
- Willins et al. (US 2003/0021250) teaches a blue tooth out-of-band management and traffic monitoring for wireless access points.
- Feder et al. (US 6522881) teaches a method and apparatus for selecting an access point in a wireless network.
- Juitt et al. (US 2003/0087629) teaches a method and system for managing data traffic in wireless networks.
- Carter (US 2003/0146835) teaches a method of object location monitoring within buildings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BSR
10/13/2005


JOHN PEZZLO
PRIMARY EXAMINER